

Product Data Sheet

Titanvene™ HD5211EA-B

Organoleptic Closure Applications

Titanvene™ HD5211EA-B is a high density polyethylene copolymer grade with a narrow molecular weight distribution. Titanvene™ HD5211EA-B has been specially developed for packaging drinking water and other beverages. Titanvene™ HD5211EA-B has excellent organoleptic properties, which does not significantly transfer taste or odour to the packaged product. Titanvene™ HD5211EA-B offering easy processing, good impact strength, high warpage resistance and excellent organoleptic properties.

Applications

Titanvene™ HD5211EA-B is designed for bottle caps of still drinking water and non-carbonated beverages.

Recommended Processing Conditions ⁽¹⁾

Titanvene™ HD5211EA-B can be easily processed on normal polyethylene injection moulding machines at temperatures in the range of 200°C to 240°C.

Food Contact Compliance

Titanvene™ HD5211EA-B can be used in food contact applications. Please contact your nearest PT. Lotte Chemical Titan Nusantara representative for more detail of food contact compliance statements for the specific grade.

| General Properties | Value ⁽²⁾ | Unit | Test Method |
|--|----------------------|-------------------|--------------------------|
| Melt Flow Rate (190°C/2.16 kg) | 12 | g/10 min | ISO 1133 Condition 4 |
| Nominal Density | 0.950 | g/cm ³ | ISO 1183 Method D |
| Vicat Softening Point | 124 | °C | ISO 306 |
| Melting Point | 131 | °C | ISO 3146 Method C |
| Mechanical Properties ⁽³⁾ | Value ⁽²⁾ | Unit | Test Method |
| Tensile Stress at Yield | 24 | MPa | ISO/R 527 Type 2 Speed C |
| Elongation at Break | 550 | % | ISO/R 527 Type 2 Speed C |
| Charpy Impact Strength | 6 | kJ/m ² | ISO 179 Type 1 Notch A |
| Flexural Modulus | 1400 | MPa | ISO 178 |
| Hardness (Shore D) | 66 | | ISO 868 Type D |
| ESCR Condition B, F ₅₀ ⁽⁴⁾ | 5 | Hours | ASTM D1693 |

(1) The optimum processing conditions can be different from one machine to the others, depend on the mould and part design.
 (2) The values shown are typical values obtained by averaging a number of tests. Small divergences from the quoted figures may occur.
 (3) Measured on compression molded plaques.
 (4) Environment Stress Cracking Resistance 10% Igepal : CO-630

